M.R.O. 1—33,400—28-11-29.

MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

G.O. No. 535 37 Press Mis.

No. 212

Dated 5 18 4 8

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 10*th August* 1858.

Read the following letters.

No. 16. From Colonel C. E. FABER, Chief Engineer; to W. H. BAYLEY, Esq., Acting Secretary to Government, dated 28th May 1858 No. 652.

SIR,

The order of Government published in Extract Minutes of Consultation No. 959 dated 20th May 1858, altho' based on the general principle of the accountability of the Ordnance Department for all stores and supplies, yet it proposes a practice so entirely novel and opposed to the custom hitherto prevalent in the Department of Public Works throughout India, that I should be lacking in duty as its Madras Local Head, were I not to respectfully offer the following objections to the arrangement about to be introduced.

2. The Department of Public Works never yet has been dependent on the Ordnance Officers for the custody and issue of its scientific instruments or drawing materials; and there seems no sufficient reason why such a system, particularly if departmentally distasteful should now be established.

3. If the issue of articles of Office supply for current use is to be attended by the same formalities and delays that accompany the supply of Machinery and Stores from the Grand Arsenal, obstructions to the duties of this Department will be needlessly raised up, and the demands on the several members of the Central Office will be very materially increased.

Vide Extract Minutes Consultation No. 460 March 12th 1857.

4. There has hitherto been no difficulty in either the storage, or in the subordinate issue by the D. P. W. of all its own instruments; and I do not perceive that any are likely to arise in future; but I regret to assure the Government most deferentially, that I really do foresee a vast amount of correspondence, if not of frequent petty vexations from the new system, and from the realization of which untoward prospects, I confidentially appeal to the indulgent re-consideration of His Lordship in Council.

5. It perhaps may not be irrelevant if I take the liberty to mention also, that I fail to see why so great an increase of work foreign to its proper duties, should now be thrown on the Ordnance Department, who I submissively represent, cannot fairly be considered the proper or fitting custodians of the delicate instruments, and scientific apparatus, in no way connected with that branch of the service, which the avocations of the Engineer render necessary.

6. Under these circumstances, I earnestly beg, that the Government will be pleased to allow the receipt and supply of drawing materials, instruments and apparatus belonging to the D. P. W., to remain on the hitherto customary footing, provided of course, that the practice be in conformity (as is confidently affirmed) with the practices of the other Presidencies, and in agreement with the orders of the Government of India.

7. In the second para of the order quoted above, the Government rule, that "the Inspector General of Ordnance and magazines, will *continue* to receive and issue the supplies according to the existing practice;" but as it has now been fully shewn that the effects of the order under promulgation, will be in reality to entirely alter existing practice whilst also making the Department of Public Works in its practical working details to be one in future dependence on another, with which it has hitherto had no connection whatever, for the implements required by its Draughtsmen, I am encouraged to express a confident hope, that the Right Honorable the Governor will be pleased to afford the relief now solicited; or that at the very least, His Lordship in Council will secure as ample a measure of independence in the internal economy of the Central Office at Madras, as the same establishments may be found to enjoy in Fort William, and at Bombay.

Underlined by the Chief Engineer.

8. In conclusion, I do myself the honor to report, that an Official representation, tending to make the skilled care and maniputative dexterity of the Ordnance Department towards complicated or delicate apparatus highly questionable, is now under despatch ; and I consider it most undesirable, that the instruments hitherto received by the Chief Engineer *in bulk* should be unpacked by any but parties familiar with their management.

9. Without the exercise of any inquisition into the drawing and other apparatus *in detail* as now (apparently under the mistaken oversight of previously existing practice) directed, it is perfectly practicable, and no less desirable, to maintain the principle of " accountability" in full force; but this desideratum is readily obtainable, I have to submit, by taking the Stock value of entire wholesale, (and *not* detail) supply.

10. We shall thus secure the complete practical avoidance of that disturbance of each package, and of interference with the Chief Engineer's arrangements and distributions, which form the otherwise unavoidable, and mortifying sequel of the recent instructions whose rescission I strenuously solicit.

No. 17. From Major E. LAWFORD, Officer in charge Central office of Public Works; to W. H. BAYLEY, Esq., Acting Secretary to Government, dated 25th June 1858, No. 1421.

Sir,

1. Referring to Extract Minutes of Consultation No. 959 dated 20th May 1858, I have the honor to submit for information copy of a letter from the Inspector General of Ordnance and Magazines dated 19th June 1858, No. 1845 requiring me to make over to him all Instruments now in the care of this Department and not actually in use.

2. That this demand is in conformity to the orders of Government is unquestionable, but that the system thus proposed to be established will tend in any way to promote efficiency or economy in the Public service, I must be permitted to express more than doubt.

3. It has long been a subject of my regret that valuable instruments liable to casual injuries which utterly disable them are laid aside as unserviceable, solely because no means of repair are available, and I endeavoured to obtain information as to the possibility of employing Mr. Orr of Madras in the performance of this useful task, I found every disposition to forward my object on the part of Mr. Orr who only required some degree of certainty to induce him to procure competent persons and the necessary plant for keeping in order all our instruments.

4. The stock of such articles has been so largely increased of late, that the necessity has been equally augmented, and I am exceedingly anxious to establish a regular system of repair under strict Departmental control, by fixing prices on each kind of work to be performed, and thus precluding overcharge.

5. I need hardly say that the transfer of the custody of our instruments to a separate authority will entirely defeat my plans, and as the Ordnance Department have no artificers skilled in such work, the disabled articles must be permanently disused to the great loss of Government.

6. It would be indeed a very great advantage were the Chief Engineer entrusted with the complete and undivided control of the supply as well as storage of his instruments, so that uniformity of pattern and every improvement might be duly attended to, and thus all the parts of one Instrument might be made to fit another of the same kind; spare screws, spirit levels, lenses &c. could be brought out, and every facility afforded for repair and preservation.

7. We require also cheap colour boxes, common levels and a variety of articles which are being produced every year to meet the demand of Railway works, but which the present system debars us from procuring, and the Government may be assured that as the aim of this Department must be to make itself efficient at the lowest cost, there will be considerable advantage in rendering itself sustained in all its requirements.

8. Under the above representation therefore I would solicit that the Extract Minutes of Consultation No. 959 dated 20th May 1858, may be placed in abeyance at least for the present; and that my plan may be fairly tried.

9. For the storage of instruments there is sufficient room in the Central office, which will be greatly enlarged by the anticipated removal of the Survey school.

Letter from the Inspector General of Ordnance and Magazines; to Colonel C. E. FABER, Chief Engineer, Department Public Works, dated 19th June 1858, No. 1845.

Sir,

With reference to Extract Minutes of Consultation No. 1786, dated 25th May 1858, Military Department, and Extract Minutes of Consultation No. 959, dated 20th May 1858, Public Works Department, I have the honor to request you will be good enough to return to the Grand Arsenal, such instruments as are not actually in use, and to furnish me with a statement of those in use on the 30th April last ; and with another of those received, and put in use since that date.

2. I have also to request that the Annual return, directed by Government to be furnished to this Department, may be sent in not later than 6 weeks after the expiration of the Official year, and that it may be accompanied by a statement of receipts during the year, with explanations of deficiencies, if any.

3. Requisitions for the issue of instruments should, in future, be submitted in the form of indents to be duly passed by this Department.

(Signed) E. F. FASKEN, Captain,
for Inspector General of Ordnance and Magazines.

No. 18. From Major E. LAWFORD, Officiating Chief Engineer; to W. H. BAYLEY, Esq., Acting Secretary to Government, dated 10th July 1858, No. 1847.

Sir,

Enclosures 2.
1 Plan.
1 Estimate.
Extract Minutes Consultation 336 dated 27th February 1858.
" 594 " 1st April "
" 906 " 12th May "
" 959 " 20th " "
Letters to Government.
No. 8887 dated 10th April 1858
" 675 " 29th May "
" 1421 " 25th June "

Adverting to the orders quoted in the margin and to my letters of the following dates and numbers, I have the honor again to draw the attention of Government to the difficulties in which this Department is placed by the present system of making it entirely dependant on the Ordnance for all its supplies of Machinery, and to the prospect of increased inconvenience if the Scientific and Drawing instruments are to be made over to the same custody.

2. The delays caused by the strict observance of the rule for cash payments before delivery have been the cause of inconvenience to the Ordnance Department, and an application has been

made by them for the removal of stores, encumbering the Arsenal, their ignorance of the prices of which obliged the authorities themselves to refuse the delivery while urgent wants of our Officers remained unattended to.

3. The Machinery is not now under proper cover, and my attention has been pointedly directed to the evil consequences likely or rather certain to ensue from the exposure of valuable Steam Engines to the weather.

4. That the demand for space in the Arsenal for the stores of this Department is felt as a very great evil by the Ordnance Officers there can be no doubt, and under the pressure of Military Engineers this demand has actually increased, while the operations of the Public Works Department have been almost suspended,

5. The waste of public money involved in the completion of Indents drawn up under totally different circumstances is not a subject for my remark, except so far as it strengthens my argument for placing us in an altered and directly responsible position in regard to our stores and machinery, inasmuch as I firmly believe, that were not the Chief Engineer required to submit an Indent at fixed periods for the future wants of his Department, but could order out supplies as required, there would be no necessity for the occupation of Ordnance buildings by Civil Stores, and moreover, the injury and loss now sustained by the pressure of an over-supply would be prevented.

6. The Honorable Court have so distinctly laid down the rule that all Stores required from England must be indented for through themselves, that it is needless now to show how injuriously the system works, but there is no prohibition that I am aware of to the Chief Engineer forwarding his own indents direct through the Government, and receiving in return the Stores of his own Department. The proposition I made of taking over the Stores on being allowed the services of certain Lascars, and a sum of one thousand Rupees for erecting temporary buildings on the Government ground adjoining the seven wells was negatived, but I have since learnt unofficially that it is nearly the same as that adopted in Calcutta, only that there the Civil Architect receives and stores the machinery of the Department Public Works, which is, or was very lately only sheltered by temporary buildings, but it is fully intended by the Chief Engineer of Bengal to adopt as soon as possible permanent arrangements for securing the stores.

7. I can see no difficulty in organizing a similar system at Madras, and though we may not be able at once to relieve the Arsenal of our surplus stores, we can at least make room for much of the proper contents of the buildings, and all space thus gained, is and must be a decided advantage.

8. Nor would the convenience of such a change be confined to the Ordnance, for by having our machinery directly under our own charge, we could much more readily detect flaws and deficiencies before it is sent to the Interior, and much wastage of cart-hire would thus be saved. The plan as thus proposed is merely of a temporary kind, but a permanent provision for our stores might be made either by building on the ground referred to, a work and store-shed according to the accompanying Plan and Estimate at a cost of Rupees (41,100) forty-one thousand, one hundred, or if the Gun Carriage Manufactory should be removed from its present site, the premises it now occupies would form an admirable Engineer Depôt for the Presidency.

9. With respect to scientific Instruments drawing materials &c., I can anticipate no sort of advantage, but very much inconvenience to both Departments from our being obliged to hand them over to the Ordnance Officers, who have no proper means of preserving or repairing them, and we should suffer great loss of time and needless trouble from having to Indent for our supplies whenever required.

10. The Medical Department are custodians of their own Stores, and why this Civil Establishment must be made dependant on a Military one for articles of constant use, seems quite incomprehensible. Many years ago the Military Board proposed some such arrangement as that

now suggested, but on the representation of the Board of Public Works the Instruments were left in their charge until they were transferred to the new Department, and this arrangement may I earnestly hope be continued.

11. Should the Government however still be of opinion that a final report and more definite plan for keeping Stores and instruments in this Department are required, I would at least request that matters may remain on their present footing until I can communicate officially with the Chief Engineers of the other Presidencies, and obtain a distinct and authentic account of the system there in force.

No. 19. From Major E. LAWFORD, Officiating Chief Engineer; to T. PYCROFT, Esq., Chief Secretary to Government, dated 20th July 1858, No. 2108.

SIR,

In my letter No. 1847, dated 10th instant I adverted to the difficulties raised by the Inspector General of Ordnance to the delivery of Machinery intended for the Department of Public Works without a pre-payment of its value and shewed the inconvenience that sometimes arises from the system, but I was not then aware that the Ordnance Department is exempt from similar obstruction to the receipt of its supplies.

Enclosure one, Copies of letters Marked A to G.

2. The accompanying copies of correspondence will however show that the Principal Commissary of Ordnance assumes the power of delivering Machinery to other Departments than the Department Public Works without any formality whatever.

To	Inspector	General	7th	July	1858, No.	1743
From	Do.		9th	do.	do. „	2712
From	Do.		14th	do.	do. „	2871
To	Do.		14th	do.	do. „	1953
From	Do.		15th	do.	do. „	2920
To	Do.		16th	do.	do. „	1990
To	Do.		17th	do.	do. „	2046

3. That Major Simpson acted under a mistaken idea of my views in this matter I do not doubt, but I may justly complain that while I am compelled to leave machinery in the Arsenal for want of a mere formality such as a transfer receipt of its value, that very machinery can be sent out to the Gun Carriage Manufactory without any such formal proceeding.

4. I bring forward this case, not to obtain the restoration of the 8 H. P. Steam Engine and Saw Machine improperly made over to the Gun Carriage Manufactory, as I conclude it will not be detained after my dissent to its transfer has been so clearly expressed, but to show the urjent necessity there is for placing this Department in a condition of less Dependance on one which has no object in meeting our wishes or facilitating our business.

Letter from Major E. LAWEORD, Officiating Chief Engineer, ; to Colonel G. BALFOUR, Inspector General of Ordnance and Magazines, dated 7th July 1858' No. 1743. A.

SIR,

On a recent visit to the Gun Carriage yard, Major Maitland brought to my notice that if he were supplied with the two six Horse Power Steam Engines and two light verandahs were constructed at small expense, he would be enabled to bring into use a considerable part of the new Machinery lately received from England.

Major Maitland asked me to allow him to have two of the Steam Engines sent out for this Department either until his own more powerful Engines can be properly set-up, or we could procure new Engines instead of those supplied to him.

On enquiry as to the state of our stores I find that we can easily spare two 6 Horse Power Engines and with your concurrence I propose to allow the Superintendent Gun Carriage Manu-

factory the use of them so long as may be necessary for present purposes, on the condition that with the completion of the new buildings those Steam Engines or two of equal power shall be returned to this Department. I have directed the Garrison Engineer to estimate for the two Verandahs for protecting the machinery from weather, and will communicate again with you on the subject shortly.

From Lieutenant Colonel G. BALFOUR, Inspector General of Ordnance Magazines; to Major E. LAWFORD, Officiating Chief Engineer, dated 9th July 1858, No. 2712. B.

SIR,

I have the honor to acknowledge the receipt of your letter No. 1713, dated 7th July 1858, and to express to you my acknowledgements for your proposal to place two 6 Horse Power Steam Engines at the disposal of the Superintendent Gun Carriage Manufactory, and I am quite ready to give my approval to your suggestion to erect two light Verandahs at the Manufactory to cover the machinery. With the facilities so readily offered to the Superintendent Gun Carriage Manufactory, the new Machinery will, I hope soon be brought into full operation.

2. Supplies of Steam Engines my still be expected from England and any deficiencies in your stock may I hope be easily replaced, at all events, I shall at all times be glad to endeavour to aid in replacing all stores you may at any time spare to the Ordnance Department from those specially sent for the use of the Department Public Works.

C.

From the Inspector General of Ordnance and Magazines; to Colonel C. E. FABER Chief Engineer, dated 11th July 1858, No. 2871.

SIR,

Adverting to your letter No. 1743, dated 7th July 1858, I have the honor to acquaint you, that the Superintendent Gun Carriage Manufactory, in a communication addressed by him to the Principal Commissary of Ordnance, requests to be informed if he may calculate upon receiving an 8-Horse-power-Engine from you as one of the two Engines with which you have offered to aid him.

2. The Principal Commissary of Ordnance informs me that there is one 8-Horse-power-Engine with 1 Independent upright Saw-Machine, in the supply of Steam Engines received by the "Malabar" for the use of the Public Works Department and if you approve of the same being transferred to the Superintendent Gun Carriage Manufactory, with a 6-Horse-power Engine, the Principal Commissary of Ordnance will be instructed to hand over the Engines accordingly.

3. If the above arrangement is carried into effect, the Department Public Works will then have remaining in the Arsenal.

2 six-Horse-power-Engines and Boilers combined.

3 six-Horse-power Engines and 3 pairs of 8½ inche bore combined with Puns and Gearing;

2 four-Horse-power-Engines and Boilers combined.

4. The 2 six-Horse power Engines made over to the Mint by your order, and the 2 proposed to be sent to the Gun Carriage Manufactory, added to the 7 represented in the above statement, will make a total of 11 Engines, the number received by the "Malabar."

5. An early reply is requested.

(Signed) G. F. FASKEN, Captain,
for Inspector Genl. of Ordnance and Magazines.

D.

From Major E. LAWFORD, Officiating Chief Engineer; to Lieutenant-Colonel G. BALFOUR, Inspector General of Ordnance and Magazines, dated 14th July 1858, No. 1953.

SIR,

In reply to your letter No. 2871, dated 14th Instant, I have the honor to inform you that the Engines I consented to transfer to the Gun Carriage Manufactory are two of six-Horse-power.

2. Major Maitland wished to have one of 8-Horse-power and I told Major Simpson that I had no objection if one of that class were available, but it is clear from your letter that such is not the case, and therefore I beg to be distinctly understood as assenting to the transfer of 2 six-Horse-power-Engines and no others.

3. Will you be so good as to furnish me with the dates of the communications from this office under which two Engines were transferred to the Mint.

4. I also beg to be informed whether in the transfers now made the cost of the Engines is debited to the Gun Carriage Manufactory and the delivery of the same detained pending a cash payment or transfer receipt being obtained.

E.

From Lieutenant-Colonel G. BALFOUR, Inspector General of Ordnance and Magazines; to Colonel C. E. FABER, Chief Engineer, dated 15th July 1858, No. 2920.

SIR,

I have the honor to acknowledge the receipt of your letter No. 1953, dated 14th July 1858, and I regret to find that the subject referred to therein is involving further references.

2. From Major Maitland's note to Major Simpson, referred to in my letter No. 2871 of the 14th Instant, I understand that Major Maitland asked you for an 8 and 6-Horse-power-Engine, and the communication he received from you on the subject led him to conclude that the Engines asked for will be placed at his disposal.

3. The 2nd para. of my letter of the 14th Instant states the fact of an 8-Horse-power-Engine being available in the Grand Arsenal, but I beg to repeat that from the supply of Engines received by the "Malabar" there is an 8-Horse-power-Engine available, and if you will be so good as to refer to my letter you will observe that your consent to the transfer of this Engine was asked.

4. The Superintendent Gun Carriage Manufactory states that an 8-Horse-power Engine is very much better suited to his wants and I hope that for the sake of the public interests, you will assent to its appropriation for the Gun Carriage Manufactory, in lieu of one of the 2 6-Horse-power-Engines already given.

5. A reference to the records of your Office or to the Mint Master, will I hope give you the information called for in the 3rd para. of your letter under acknowledgement.

6. The cost of the Engines to be transferred is to be debited to the Gun Carriage Manufactory.

F.

From Major E. LAWFORD, Officiating Chief Engineer; to Lieutenant-Colonel G. BALFOUR, Inspector General of Ordnance and Magazines, dated 16th July 1858, No. 1990.

SIR,

With reference to my letter of the 14th Instant, No. 1953, I have the honor to inform you that I have reason to believe the 8-Horse-power-Steam-Engine with vertical Saw-Machine belonging to the Department Public Work has been sent by the Principal Commissary of Ordnance to the Gun Carriage Manufactory and as you are already aware that this Engine is not available for that purpose I request it may be restored to the Arsenal as soon as possible for delivery to my charge when required.

2. It seems that this transfer of our Machinery contrary to my express stipulation twice officially communicated to you, is the result of a private correspondence between Majors Maitland and Simpson, and that the latter Officer took on himself in a note to the former to imply that it had my sanction and your own, but the inference is certainly founded on mistake, Major Maitland also appears to have misunderstood both your views and mine.

No. 1743, dated 7th July 1858.

3. But the most important point I have to notice is, that while the Ordnance Officers absolutely refuse on all occasions to deliver up to this Department, Machinery specially sent out for its use without a cash payment of its value by the delay of which on the part of the local Officers, I am prevented from sending this very Steam Saw Machine to its destination where it is urgently wanted they have the power and the will to make over our Machinery to other Departments without any such formalities.

4. It will be for the Government to determine how far such a system is conducive to the good of the public service.

G.

From Major E. LAWFORD, Officiating Chief Engineer; to Lieutenant-Colonel G. BALFOUR, Inspector General of Ordnance and Magazines, dated 17th July 1858, No. 2046.

SIR,

I have the honor to acknowledge the receipt of your letter No. 2920, dated 15th July 1858 and request you will be good enough to forward true copy of the communication from myself to Major Maitland referred to in para. 2.

2. Your letter of the 14th Instant states that an 8 H. P. Engine with one independant upright saw machine is among those in the Arsenal belonging to this Department; but the transfer of this Engine was distinctly declined in my letter of the 9th June No. 986 and you have actually passed my indent for it.

3. That this is the 8 H. P. Engine removed to the Gun Carriage Manufactory I can have no doubt because it was stated by Major Simpson to be the only one in the Arsenal.

4. Referring to Para. 5 of your letter I must again beg the favor of your forwarding to me copies of the papers on which two Engines were transferred to the Mint, for the only record of the transaction in this Office is the letter to the Mint, Master conveying the Chief Engineer's consent to the transfer.

Dated 26th February 1858, No. 7688.

No. 20. From Major E. LAWFORD, Officiating Chief Engineer; to T. PYCROFT, Esq., Chief Secretary to Government, dated 23rd July 1858, No. 2205.

SIR,

Since I addressed Government in my letter No. 2108, dated 20th instant, on the subject of a Steam Engine of 8 Horse power transferred to the Gun Carriage Manufactory, the order of Government marginally quoted has been brought to my notice, from which I regret to find that I acted without any authority in consenting to lend two-6-Horse-Power-Engines, and I can only plead in excuse my absence from Madras at the date of the order, and my desire to contribute to the convenience of the Ordnance Department while I felt that the Engines in question would be better cared for if in actual use than they now are.

Dated June 21st 1857, No. 145.

2. But the 8-Horse-Power-Engine which the Principal Commissary of Ordnance transferred to the Gun Carriage Manufactory had been already indented for, and sanctioned by Government for the Coimbatore District, and I knew that I could not make it over to another Department, a fact of which the Inspector General of Ordnance and Magazinesought I conceive to have been well aware.

Dated 28th June 1858, No. 1217.

No. 21. From Major E. LAWFORD, Officiating Chief Engineer; to T. PYCROFT, Esq., Chief Secretary to Government, dated 31st July 1858, No. 2401.

SIR,

In continuation of my letter No. 2108, dated 20th July 1858, and with reference to Extract Minutes of Consultation No. 192, dated 18th March 1858, I have the honor to submit copy of a letter* from the Acting Mint Master No. 111 dated 28th July 1858, stating that the Steam Engines issued to him have not yet been paid for, and thus another instance is afforded of the facilities enjoyed by other Departments of obtaining Machinery from the Arsenal while our urgent demands are left unfulfilled, the Jackattalla works being now actually delayed for want of Saw-Machinery an indent for which was passed by Government on the 28th June 1858, but which I cannot obtain from the Arsenal owing to the District Engineer's neglect to send a transfer receipt.

1 copy of letter No. 111, dated 28th July 1858.

Extract Minutes of Consultation No. 1217.

2. I offer these observations in the hope that the Government will see fit to place the Department P. W. on the same footing as other Department's in regard to the facility of obtaining Machinery.

Letter from Lieutenant-Colonel F. C. COTTON, Acting Mint Master; to Major E. LAWFORD, Officiating Chief Engineer dated Mint 28th July 1858, No. 111.

SIR,

Para. 1st. In answer to your letter of the 26th Instant, I beg to say that as the prices of the Steam-Engines in question were not known, they were of necessity issued without pre-payment; and as the price has not yet been reported to me they are not yet paid for.

2nd. The advisability of issuing these Engines without waiting for their cost to be pre-paid as is usual was explained in my letter forwarded to you with Extract Minutes of Consultation No. 192, of 18th March 1858.

No. 22. ORDER THEREON, No. 1537; dated 4th August 1858.

Para. 1. The communications recorded above represent the inconvenience to which the Department of Public Works will be subjected by the order of the 20th May 1858, making the

Arsenal the depository for the Scientific Instruments appertaining to that Department, and the Inspector General of Ordnance and Magazines the controller of their receipt and issue. They also refer to the delay and difficulties arising from the Rule which requires cash payments before delivery. Both Colonel Faber and Major Lawford urge strong objections to the proposed system, and the latter Officer doubts whether it is one calculated to promote either efficiency or economy.

2. Irrespective of the inconveniences pointed out, it is stated that the Public Works Stores already encumber the Arsenal ; that the want of space in it in consequence, is felt as a great evil by the Ordnance Officers ; and that valuable Steam Engines and Machinery are exposed to injury from the want of proper cover to protect them. Major Lawford has in view his own plans for the custody and care of the Stores of the Public Works Department, as well as for their proper and economical repair, especially of Scientific Instruments, the means for which are said to be wanting in the Ordnance Department, and states that there is sufficient storage room for such instruments in the Central Office. He therefore solicits that the orders of the 20th May 1858, may be held in abeyance, and that the receipt and supply "of drawing materials, instruments and "apparatus belonging to the Department Public Works, "be left" on the hitherto customary "footing."

3. The Government will not now enter upon a discussion of the various points mooted in the above letters, but as it appears from para. 9 of Major Lawford's letter of the 25th June that "for the storage of instruments there is sufficient room in the Central Office, which will be greatly "enlarged by the anticipated removal of the Survey school," the Government, will accede to the Officiating Chief Engineer's wishes and permit the orders of the 20th May, so far as it affects Scientific Instruments of the Department of Public Works, now under charge of the Chief Engineer to remain in abeyance and allow matters as regards those instruments to continue on their former footing, pending the receipt of information as to the practice which may eventually be established in Bengal for this branch of the Department. Under date the 22nd June last, the Supreme Government were addressed for information "as to the means at the "disposal of the Chief Engineer in that Presidency for receiving, storing, keeping in order and "issuing Machinery, Stores and Scientific Instruments sent out for the use of the Public Works "Department." The reply to this reference, just received, intimates that the subject has been ordered to be referred for consideration and report to a Committee of Officers, as the practice obtaining in that Presidency has not been "found altogether satisfactory." The Government of India however promise to communicate in due course the result of the Committee's investigation, when the subject will again be considered.

From Government of India, 16th July 1858, No. 3305.

4. As regards Scientific Instruments already received and lodged in the Arsenal or to be hereafter received from England, the Government will not authorize any alteration of their orders pending the receipt of the report from the Bengal Committee. They will be under the charge of the Ordnance Department, and will be obtained by indent according to the established custom.

5. The deviation from the regular mode of proceeding exhibited in Major Lawford's letter of the 20th July, relative to the Steam Engine obtained by the Superintendent of the Gun Carriage Manufactory from the Principal Commissary of Ordnance will be brought to the notice of the Inspector General of Ordnance and Magazines. The eight horse power Engine will of course be returned, if this has not been already done, and the two six horse power Engines referred to in Major Lawford's letter of the 23rd July, will be procured in the authorized manner.

(Signed) T. PYCROFT,
Chief Secretary.

Central Office of P.W.
Fort Saint George 11
20th May 1858.

No 652.

From,

The Offg Engineer,

To,

The Secretary to
Government P.W.D.

Sir,

Public. The order of Government published in Extract Minutes of Consultation No 959 dated 20th May 1858, altho' based on the general principle of the accountability of the Ordnance Department for all Stores and Supplies, yet it proposes a practice so entirely novel and opposed to the Custom hitherto prevalent in the Department of Public Works throughout India, that I should be lacking in duty as its Madras Local Head, were I not to respectfully offer the following objections to the arrangement about to be introduced

2— The Department of Public Works never yet has been dependent on the Ordnance Officers for

for the custody and issue of its Scientific Instruments or drawing materials; and there seems no sufficient reason why such a system, particularly if departmentally distastefull, should now be established-

3— If the issue of Articles of Office supply for Current use is to be attended by the same formalities and delays that accompany the supply of Machinery and Stores from the Grand Arsenal, obstructions to the duties of this Department will be needlessly raised up, and the demands on the Several Members of the Central Office will be very materially increased-

Vide Ft. Wm. Cons. No 460. March 12/57.

4— There has hitherto been no difficulty in either the Storage, or in the Subordinate issue by the S.P.D. of all its own instruments; and I do not perceive that any are likely to arise in future; but I regret to assure the Government most deferentially, that I really do foresee a vast amount of correspondence, if not of frequent petty vexations from the new System, and from the realization of which untoward prospects, I confidentially appeal to the indulgent reconsideration of-

of His Lordship in Council-

5— It perhaps may not be irrevelant if I take the liberty to mention also, that I fail to see why so great an increase of work foreign to its proper duties, should now be thrown on the Ordnance Department, who I submissively represent, cannot fairly be considered the proper or fitting custodians of the delicate instruments, and Scientific apparatus, in no way connected with that branch of the Service; which the avocations of the Engineer render necessary-

6— Under these circumstances, I earnestly beg, that the Government will be pleased to allow the receipt and supply of drawing materials, instruments and apparatus belonging to the S.P.D. to remain on the hitherto customary footing, provided of course, that the practice be in conformity (as is confidently affirmed) with the practice of the other Presidencies, and in agreement with the orders of the Government of India-

7— In the second para of the order quoted above, the Government rule, that "the Inspector "General

"General of Ordnance and Magazines, will continue
"to receive and issue the Supplies according to the
"Existing practice;" but as it has now been fully shewn
that the Effects of the order under promulgation,
will be in reality to Entirely alter Existing prac-
tice whilst also making the Dep.t of P. b. in its
practical working details to be one in future
dependence on another, with which it has hither-
to had no connection whatever, for the imple-
ments required by its Draughtsmen, I am en-
couraged to express a confident hope, that the
Right Honorable the Governor will be pleased to
afford the relief now solicited; or, that at the
very least, His Lordship in Council will secure
as ample a measure of independence in the
internal economy of the Central Office at Madras,
as the same Establishment may be found to en-
joy in Fort William, and at Bombay.-

8— In conclusion, I do myself the
honor to report, that an Official representation,
tending to make the skilled care and manipu-
lative dexterity of the Ordnance Department
towards

× underlined by the Chief Engineer.

2/

15

towards complicated or delicate apparatus highly-
questionable, is now under despatch; and I con-
sider it most undesirable, that the instruments
hitherto received by the Chief Engineer in bulk-
should be unpacked by any but parties fa-
miliar with their management.

9— Without the exercise of any inquisition-
into the drawing and other apparatus in
detail, as now (apparently under the mistaken
oversight of previously existing practice) directed,
it is perfectly practicable, and no less desirable,
to maintain the principle of "accountability"
in full force; but this desideratum is readily
obtainable, I have to submit, by taking the
Stock value of Entire wholesale, (and not detail)
Supply.-

10— We shall thus secure the complete-
practical avoidance of that disturbance of
Each package, and of interference with the
Chief Engineers arrangements and distributions,
which form the otherwise unavoidable, and-

mortifying

mortifying sequel of the recent instructions whose
rescission I strenuously solicit,—

I have the honor, to be

Sir,

Central Office P. D.
28th May 1858.

Your most Obedient Servant.

Lieut Colonel.
Chief Engineer,

To,

The Secretary, to
Government, P. D.—

Central Office of Public Works
Fort Saint George
25th June 1858.

No. 1421.

From,

The Officer in charge
Central Office P.W.D.

To,

The Secretary to Government
P.W.D.

Sir,

1. Referring to Colonel Minutes of Committee No. 959 dated 20th May 1858, I have the honor to submit for information copy of a letter from the Inspector General of Ordnance and all agazines dated 19th June 1858, requiring me to make over to him all Instruments now in the care of this Department and not actually in use.-

2. That this demand is in conformity to the orders of Government is unquestionable, but that the system thus proposed

to

Dy. Works 1858 Dept.
Dy to Govt. No. 1172

From,

The Chf Engineer,

To,

The Secretary to Government
Public Works Department

Dated 28th May 1858.
Received 31st.

No. 652.
C.E. No. 1537. 4th August 1858.

Offers objections to the arrangements prescribed in Govt. Min. Cons. No. 959 of 20th May 1858 for the custody and issue of Scientific Instruments and for reasons assigned, solicits that the receipt and supply may be allowed to remain on the old footing.-

Dy to Govt 25th May 58 No. 2872
" " 17th March 57. 1142

Copy in a L to C
Dy 19th May 1859 No. 12

No. 16.

C 12th July 16th "

to be established will tend in any way to promote efficiency or economy in the public service, I must be permitted to express more than doubt.-

3. It has long been a subject of my regret that valuable instruments liable to casual injuries which utterly disable them are laid aside as unserviceable, solely because no means of repair are available, and I endeavoured to obtain information as to the possibility of employing Mr. Orr of Madras in the performance of this useful task. I found every disposition to forward my object on the part of Mr. Orr, who only required some degree of certainty to induce him to procure competent persons and the necessary plant for keeping in order all our instruments.-

4. The stock of such articles has been so largely increased of late, that the necessity has been equally augmented, and I am exceedingly anxious to establish a

a regular system of repair under strict Departmental control, by fixing prices on each kind of work to be performed, and thus precluding overcharge.-

5. I need hardly say that the transfer of the Custody of our Instruments to a separate authority will entirely defeat my plans, and as the Ordnance Department have no Artificers skilled in such work, the disabled articles must be permanently disused to the great loss of Government.-

6. It would be indeed a very great advantage were the Chief Engineer entrusted with the complete and undivided control of the supply as well as storage of his instruments, so that uniformity of pattern and every improvement might be duly attended to, and thus all the parts of one Instrument might be made to fit another of the same kind; spare screws,

screws, spirit levels, lenses &c. could be brought out, and every facility afforded for repair and preservation.-

7. We require also cheap colour boxes, common tools and a variety of articles which are being produced every Year to meet the demand of Railway Works, but which the present system debars us from procuring, and the Government may be assured that as the aim of this Department must be to make itself efficient at the lowest cost, there will be considerable advantage in rendering it self-sustained in all its requirements.-

8. Under the above representation therefore I would solicit that the Extract Minutes of Consultation №. 959 dated 20th. May 1858, may be placed in abeyance at least for the present

present; and that my plan may be fairly tried.- 23

9. For the storage of instruments there is sufficient room in the Central Office, which will be greatly enlarged by the anticipated removal of the Survey School.-

I have the honor to be,

Sir.

Your most Obedient Servant

Central Office of P.W.
Fort Saint George
25 June 1858.-

Ex. Lucay

L. Lawford Major
Supt. Engr. Southern Circle
In charge Central Office of P.W.

Ordnance Department 25

№ 1845

From

The Inspector General
of Ordnance and Magazines

To

The Chief Engineer
Department Public Works

Sir,

With reference to Extract Minutes of Consultation № 1786 dated 25th May 1858, Military Department, and Extract Minutes of Consultation № 959 dated 20th May 1858, Public Works Department, I have the honor to request you will be good enough to return to the Grand Arsenal, such Instruments as are not actualy in use, and to furnish me with a statement of those in use on the 30th April last, and with another of those received, and put in use since that date.

2. I have also to request that the Annual Return, directed by Government to be furnished to this Department, may be sent in not later than 6 weeks after the expiration of the Official Year, and that

Ord Proc 25 May 1858 № 1786
Ord Proc 25 May 1858 № 959
Ord Proc 28-29 July 1858 № 84
Ord Proc 1st Sept 1858 № 1
Ord Proc 18th — — № 1
Copy in a Ltr dated 30th April 1859 № 1
Ord Proc 2nd May 1859 № 12

12

From
The Officer in charge
of Central Office of Ord.
&c
The Secretary to Government
Public Work Department

Dated 25th June 1858
Rec'd 25 } June 1858

Genl. № 1421.

Submitting for information a copy of a letter from the Inspector General of Ordnance and Magazines requiring him to make over to him all Instruments now in the care of his Department and actually in use with observations thereon

Ord Proc 1st July 1858 № 12

that it may be accompanied by a statement of receipts during the year, with explanations of deficiencies, if any.

3. Requisitions for the issue of instruments should, in future, be submitted in the form of Indents to be duly passed by this Department.

Inspr. Genl's. Office
Fort St. George
19th June 1858.

I have the honor to be &c.
(Signed) E. J. Fasken Captain
for Inspr. Genl. of Ordce. & Magr.

Encl. 1 Diary

(True Copy)
Major
Superintending Engineer
In charge of the Central Office of P.W.

Central Office Public Works
Fort Saint George
10th July 1858

No. 1817

29

From

The Officiating Chief Engineer

To

The Secretary to Government

Department Pubc Works

Sir

Public.
Encls 2
1 Plan
1 Estimate

Adverting to the orders quoted in the margin and to my letters of the following dates and numbers, I have the honor again to draw the attention of Govt to the difficulties in which this department is placed

Encl 336 dy 4th May/58
" 596 " 1st June/58
906 " 12 May/58
959 " 20 May/58
Sellins to Govt

by the present system of making it entirely dependant on the Ordnance for all its supplies of machinery, and to the prospect of increased inconvenience if the scientific instruments are to be made over to the same Custody

2nd The delays caused by the strict observance of the rule for cash payments before

Copy in a L & G
of 19th May 1859 No 12.

Enclosure in a letter
From
The Officer in charge
of Central Office of P.W.
dt
The Secy to Govt
Public Works Dept

Dated 25th June 1858
No 2

Subject
Public Works No 1406/58

Copy of a letter from the Inspector General of Ordnance and Magazines regarding the return to the Grand Arsenal of such instruments as are not actually in use.

before delivery have been the Cause of in=
=convenience to the Ordnance department and
an application has been made by them for
the removal of stores encumbering the
Arsenal, their ignorance of the prices of
which obliged the authorities themselves
to refuse the delivery while urgent wants
of our officers remained unattended to.

3 The Machinery is not now under proper
Cover, and my attention has been pointedly
directed to the evil Consequences likely or rather
certain to ensue from the exposure of valuable
Steam Engines to the weather.

4 That the demand for space in
the Arsenal for the Stores of this depart=
ment is felt as a very great evil by the
Ordnance Officers there Can be no doubt
and under the pressure of Military exigency
this demand has actually increased,
while the operations of the Public Works
Department have been almost suspended

5- The

5- The waste of public money involved
in the Completion of Indents drawn upon
under totally different circumstances is not
a subject for any remarks, except so far as
it strengthens any argument for placing us
in an altered and directly responsible
position in regard to our stores and
machinery, - inasmuch as I firmly believe
that if were not the Chief Engineer required
to submit an Indent at fixed periods
for the future wants of his department,
but Could order out supplies as required
there would be no necessity for the
occupation of Ordnance Buildings
by Civil Stores, and moreover the injury
and loss now sustained by the pressure
of an oversupply would be prevented.

6. The Honorable Court have so distinc=
=tinctly laid down the rule that all
Stores required from England must be indent=
=ed for, I forbear to remark that it is
needless

needless more to show how injuriously the system works, but there is no prohibition that I am aware of to the Chief Engineer forwarding his own Indents direct through the Government, and receiving in return the Stores of his own Department. The proposition I made of taking over the stores on being allowed the services of certain Sirdars, and a Sum of one thousand Rupees for erecting temporary buildings on the Government Ground adjoining the Sewer wells was negatived, but I have since learnt unofficially that it is nearly the same as that adopted in Calcutta, only that there the Civil Architect receives and stores the Machinery of the Department Public Works, which is always very badly, only sheltered by temporary buildings, but it is fully intended by the Chief Engineer of Bengal to adopt as soon as possible permanent arrangements for securing the stores.

7- I can see no difficulty in organizing a similar

system at Madras, and though we may not be able at once to relieve the Arsenal of our surplus Stores we can at least make room for much of the proper Contents of the buildings and all space thus gained, is and must be a decided advantage.

8- Nor would the Convenience of such a Change be confined to the Ordnance for by having our Machinery directly under our own Charge, we could much more readily detect flaws and deficiencies before it is sent to the Interior, and much wastage of Cartage would thus be saved. The plan as thus proposed is merely of a temporary Kind but a permanent provision for our Stores might be made either by building on the ground referred to a work and Store Shed according to the accompanying plan and Estimate at a Cost of Rupees (1,1100) forty one thousand one hundred or if the Gun Carriage Manufactory

Should

should be removed from its present site, the premises it now occupies would form an admirable Engineer Depot for the Presidency

9 With respect to Scientific Instruments Drawing Materials &c I can anticipate no sort of advantage, but very much inconvenience to both Departments from our being obliged to hand them over to the Ordnance Officers, who have no proper means of preserving or repairing them, and we should suffer great loss of time and needless trouble from having to Indent for our supplies whenever required.

10 The Medical Department are custodians of their own Stores and why this Civil Establishment must be made dependant on a Military one for articles of Constant use seems quite incomprehensible - Many years ago the Military Board proposed some such arrangement as that now suggested, but on the Representation of the Board of Public Works the Instruments were left in their Charge until they were transferred to the new Department, and this arrangement may I earnestly hope be continued.

11 Should the Government however still be of opinion that a final Report and more definite plan for keeping Stores and Instruments in this Department are required, I would at least request that matters may remain on their present footing until I can communicate officially with the Chief Engineers of the other Presidencies and obtain a distinct and authentic account of the System there in force.

35

I have the honor to be
Sir
Your most Obedient
Servant
(Signed) E Langford
Offg Chief Engineer

Fort Saint George
10th July 1858

Central Office / Public Works
Fort St. George
10th July 1858

No. 1847

From

The Officiating Chief Engineer

To

The Secretary to Government
Reports Pub. Works

Sir,

Public
Genl. C
No.
Letters

Adverting to the orders quoted
in the margin and to any letters of the
following dates and numbers, I have the
honor again to draw the attention of
Government to the difficulties in which
this Department is placed by the present
system of making it entirely dependant
on the Ordnance for all its supplies of
Machinery, and to the prospect of increased
inconvenience if the Scientific and Draw-
ing instruments are to be made over to
the same Custody

Genl. 336 dy 27th May 58
594 " 10th July 58
906 " 12th May 58
959 " 20th May 58
Letters to Govt
No. 8887 dy 10th July 58
" 675 dy 29th May 58
" 1121 dy 25th June 58

2. The delays caused by the strict ob-
servance of the rule for Cash payments
before

before delivery have been the cause of inconvenience to the Ordnance Department, and an application has been made by them for the removal of Stores encumbering the Arsenal, their ignorance of the prices of which obliged the authorities themselves to refuse the delivery, while urgent wants of our Officers remained unattended to

3. The Machinery is not now under proper Cover, and any attention has been pointedly directed to the evil consequences likely or rather certain to ensue from the exposure of valuable Steam Engines to the weather

4. That the demand for Space in the Arsenal for the Stores of this Department is felt as a very great evil by the Ordnance Officers - there can be no doubt, and under the pressure of Military exigencies this demand has actually increased, while the operations

of

of the Public Works Department have been almost suspended 39

5 The waste of public money involved in the Completion of Indents drawn up under totally different circumstances is not a subject for any remark, except so far as it strengthens any argument for placing us in an altered and directly responsible position in regard to our Stores and Machinery, inasmuch as I firmly believe, that were not the Chief Engineer required to submit an Indent at fixed periods for the future wants of his Department, but could order out Supplies as required, there would be no necessity for the occupation of Ordnance Buildings by Civil Stores, and moreover, the injury and loss now sustained by the pressure of an over supply would be prevented

6. The Honorable Court have so distinctly laid down the rule that all Stores required from England must be indented for through themselves, that

that it is needless now to show how injuriously the system works, but there is no prohibition that I am aware of to the Chief Engineer forwarding his own Indents direct through the Government, and receiving in return the stores of his own department. The proposition I made of taking over the stores on being allowed the services of certain Lascars, and a sum of One thousand Rupees for erecting temporary buildings on the Government ground adjoining the Sewer Wells was negatived, but I have since learnt unofficially that it is nearly the same as that adopted in Calcutta, only that there the Civil Architect receives and stores the Machinery of the department Public Works, which is, or was very lately only sheltered by temporary buildings, but it is fully intended by the Chief Engineer of Bengal to adopt as soon as possible permanent arrangements for securing the Stores

7. I can see no difficulty in organizing a similar system at Madras, and though we may not be able at once to relieve the Arsenal of our surplus stores, we can at least make room for much of the improper contents of the buildings, and the space thus gained, is, and must be a decided advantage

8. Nor would the convenience of such a change be confined to the Ordnance, for by having our Machinery directly under our own charge, we could much more readily detect flaws and deficiencies before it is sent to the Interior, and much wastage of Cart hire would thus be saved. The plan as thus proposed is merely of a temporary kind, but a permanent provision for our stores might be made either by buildings on the ground referred to, a work and stone shed according to the accompanying plan and Estimate at a cost of Rupees /41.100/ forty one thousand one hundred,

or

or if the Gun Carriage Manufactory should be removed from its present site, the premises it now occupies would form an admirable Engineer Depôt for the Presidency

9. With respect to Scientific Instruments Drawing Materials &c. I can anticipate no sort of advantage, but very much inconvenience to both Departments from our being obliged to hand them over to the Ordnance Officers, who have no proper means of preserving or repairing them, and who should suffer great loss of time and needless trouble from having to send for our supplies whenever required.

10. The Medical Department are Custodians of their own Stores, and why this Civil Establishment must be made dependant on a Military one for Articles of Constant use, seems quite incomprehensible - Many years ago the Military Board proposed some such arrangement

as

as that now suggested, but on the representation of the Board of Public Works the Instruments were left in their charge until they were transferred to the Revenue Department, and this arrangement may I earnestly hope be continued

11. Should the Government however still be of opinion that a final report and more definite plan for keeping Stores and Instruments in this Department are required, I would at least request that matters may remain on their present footing until I can communicate officially with the Chief Engineers of the other Presidencies, and obtain a distinct and authentic account of the System there in force.

I have the honor to be
Sir
Your Most Obed Servt
[signature]
Offg Chief Engineer

Fort Saint George
10th July 1838

Lt Colonel

(New Work)

Abstract of Estimate No. of 185 /5 45

District.

Work. Constructing an Engineer Store for Machinery, Intrenching Tools, Scientific Instruments, Drawing Materials &c. with Carpenters and Smiths Shops attached and Suitable Quarters for Warrant Officer in Charge.

Quantities	Description of Work.	Rate Rs.	As.	P.	Amount. Rupees.	Amount of each part. Rupees.
C. Yds.						
	Building for Intrenching Tools and Machinery with Carpenters & Smiths Shops attached					
79498 C.ft.	Brick in Chunam — ℔ C.ft.	"	1	9	8695	
2832 - Do.	Teakwood wrought & put up — Do.	2	4	"	6372	
12864 S.ft.	Terracing with Brick on Edge in Chunam with 3 Courses of flat tiles 1½" Jelly and 3 Coats Chunam plaster — ℔ Sq.ft.	16	8	.	2122	
1293 C.ft.	Brick in Chunam — C.ft.	"	1	10	148	
6432 S.ft.	Roofing with Teakwood rapers nails, two Courses flat tiles in Chunam and 3 Coats Chunam Plaster — Sq.ft.	10	8	.	675	
38894 Do.	Plastering with 3 Coats Chunam Do.	2	8	"	973	
1160 R.ft.	of Cornice — R.ft.	"	4	"	290	
14560 S.ft.	Flooring with 10" Sq. bricks in Chunam with wall bricks under — Sq.ft.	7	"	"	1019	
	Carried over				20294	

Quantities.	Description of Work.	Rates. Rs.	a.	P.	Amounts. Rupees.	a.	Parts. Pices.
C. Yds.							
	Brought over				20295		
	30 Double Batten Doors with hooks, hinges &c. ea.	35	"	"	700		
	2 D° D° D° D° D° D°	24	8	"	149		
	6 D° D° Windows with D° D° and Frame with iron bars ea.	26	"	"	156		
8232	Sft. White Paint 3 Coats Sq.	2	8	"	266		
3201	D° Wood oil 3 Coats D°	1	8	"	48		
3552	D° Slate Color 3 Coats D°	2	8	"	89		
	Excavating foundations	"	"	"	90		
	Filling in Basement 2 feet high	"	"	"	350		
	Sundry Charges and on Scaffolding	"	"	"	1319	23301	
	Varnishing Instruments Building &c.						
32257	Cft. Brickwork in Chunam Mortar	"	1	9	3525		
636	Sft. Teakwood wrought & Planed	2	4	"	1132		
6416	Sft. Terracing as above Sq.	16	1	"	1016		
5700	Ft. Flooring with 4 ins Sq. Bricks in Chunam with a Lime Concrete course of wall Bricks under neath	"	"	"	399		
1816	Ft. Plastering 3 Coats Chunam Sq.	1	5	"	2554		
	29 Batten Doors with hinges, locks, Bolts &c. ea.	25	"	"	725		
	Carried Over				7552	23301	

Quantities.	Description of Work.	Rates. Rs.	a.	P.	Amounts. Rupees.	a.	Parts. Pices.
	Brought over				7552	23301	
	6 Half Doors (Batten) with hinges. hooks, Bolts &c. ea.	8	14	"	84		
1066	Sft. of Cornice Sq.	"	4	"	265		
3549	Sft. White Paint Sq.	2	8	"	89		
3146	D° Slate Color Paint D°	2	8	"	78		
	Upper Story						
6056	Cft. Brickwork in Chunam Cft.	"	1	10	6911		
	26 Pillars with 3 Granite Pedestals Complete ea.	8	14	"	364		
9415	Sft. Teakwood wrought & planed Sq.	2	4	"	2127		
1672	Sft. Terracing with 4 ins Brick on Edge in Chunam 3 Coats & Rattles ins with Selly & 3 Coats Chunam Sq.	16	8	"	276		
2424	Ft. Verging with Teakwood Verges Rails 2 Coats Plastering in Chunam & 3 Coats Plastering D°	10	8	"	255		
1632	Sft. Plastering 3 Coats D°	2	8	"	191		
464	Sft. of Cornice Sq.	"	4	"	101		
	12 Doors half Venetian with Bolts hinges Bannalee with hooks Bolts &c. Complete ea.	30	"	"	360		
2195	Sft. White Paint 3 Coats Sq.	2	8	"	55		
1500	D° Slate Color Paint 3 Coats D°	2	8	"	37		
3480	D° Wood oil Paint 3 Coats D°	1	8	"	52		
	Excavating foundations and Filling in Basement	"	"	"	80		
	Carried Over				12660	23301	

Quantities	Description of Works	Rate			Amount	Amount of Each part
Cyt					Rupees	Rupees
	Brought over				571	38145
	Excavating foundation and &c					
	Scaffolding	"	"	"	44	
12800	Sqr. Covering with Chunam to Compound wall	Sqr.	1	4	160	
	Repairs to Trenches	"	"	"	100	
						875
	1 Chest of Carpenters Tools Complete	"	"	"	350	
	1 Do. Smiths Do. Do.	"	"	"	200	
	12 Platform Carts	Ea	60	"	720	
	8 Hackery Carts	Do.	75	"	600	
	6 Trucks with low wheels	Ea	46	"	184	2054
	Contingencies					26
	Total Company's Rupees					41100

Central Office of P.W.D.
Fort St. George
10th July 1858.

Lan[illegible] Major
Offg. Chief Engineer &c

	Brought over				12660	23301
	Scaffolding	"	"	"	200	
	Sundry Charges	"	"	"	510	13721
	Guard Room & Gateway					
2757	Cft. Brick work in Chunam Cft.	"	1	9	530	
61	Do. Teakwood wrought & pointed Do.	2	4	"	128	
756	Sft. Terracing Sqr.	16	5	"	125	
3500	Do. Flastering Do.	2	5	"	88	
	2 Batten Doors with Hooks, hinges &c. Ea.	6	14	"	28	
4	Do. Venetian Shutters with Do. Do. Do.	4	10	"	46	
110	Running Feet of Cornice Rft.	"	4	"	28	
200	Sqft. Flooring with 10 ins Sqrs. Bricks Sqr.	7	"	"	14	
	One Entrance Gate Framing 6" thick Complete with Iron works	"	"	"	50	
	Excavating foundation, filling Basement and Scaffolding &c.	"	"	"	22	
312	Sft. White Sand Stone Sqr.	2	5	"	8	
266	Do. Slate Coloured Stone Do.	2	8	"	11	1110
1656	Cft. Brick work in Chunam Cft.	"	1	4	378	
833	Sft. Flastering with 2 Coats &c. Sqr.	2	"	"	44	
	2 Wooden gates one in South side Entrance and the other in Cross wall within Compound	"	"	"	90	
320	Sft. Flooring with White Sand Stone Slabs Sqr.	2	4	"	6	
	Carried over				571	38145

Copy in a L to E
8/19th May 1859 No 12

Inclosure

From

The Officiating Chief Engineer
&c &c.

To

The Secretary to Government
&c &c

Dated 10th
Recd 12 July 1858

O.O. No 1584, 58

No 1847

Abstract Estimate of Constructing an Engineer Store for Machinery, Fitting Tools Seventy six Carpenters Shewing Materials &c with Carpenters and Smiths Shops adjacent and Sufficient Quarters for Warrant Officer in charge

Amounting to Company Rs 24,000 - - -

A

Central office P.M.
Fort Saint George
No. 1743. 17th July 1858.

The Inspector General
of Ordnance & Magazines

57

Sir,

On a recent visit to the Gun Carriage yard Major Maitland brought to my notice that if he were supplied with two six Horse Power Steam Engines and two light verandahs were constructed at small expense, he would be enabled to bring into use a considerable part of the new machinery lately received from England.

Major Maitland asked me to allow him to have two of the Steam Engines sent out for this Department either until his own more powerful Engines can be properly set up, or we could procure new Engines instead of those supplied to him.

On enquiry as to the state of our Stores I find that we can easily spare two 6 Horse Power Engines and with your Concurrence I propose to allow the Superintendent Gun Carriage Manufactory the

use

ents of them so long as may be necessary for present purposes, on the Condition that with the Completion of the new buildings those Steam Engines or two of equal power shall be returned to this Department.

I have directed the Garrison Engineer to estimate for the two verandahs for protecting the machinery from weather, and will Communicate again with you on the subject shortly.

I have &c.
(Signed.) C. Crawford.
Offg: Chief Engineer

Central office P. W.D.
Fort Saint George
7 July 1858

(True Copy)
Offg. Chief Engineer

Compd. [illegible]

B

53

No 2712

To
The Offg Chief Engineer

Sir,

I have the honor to acknowledge the receipt of your letter No 1743 dated 7 July 1858 and to express to you my acknowledgements for your proposal to place two 6 Horse Power Steam Engines at the disposal of the Superintendent Gun Carriage Manufactory, and I am quite ready to give my approval to your suggestion to erect two light Verandahs at the Manufactory to cover the Machinery. With the facilities so readily offered to the Supdt Gun Carriage Manufactory, the new Machinery will, I hope soon be brought into full operation

2. Supplies of Steam Engines may still be expected from England and any deficiencies in your stock may I hope be easily replaced at all events, I shall

do

at all times be glad to endeavour to aid in replacing all Stores you may at any time spare to the Ord.ce Depart.t from those specially sent for the use of the Department Public Works.

Insp.r Gen.l's Office
9th July 1858

Have &c.
(Sgd.) G. Balfour Lt.Col.
Insp.r Gen.l of Ord.ce Magazines

(True Copy)

Sgd.
Off.g Chief Engineer

Comp.d (54) W.

Ordnance Department

No. 2871

Sir,

The Inspector General of Ordnance and Magazines.

&c &c &c

The Chief Engineer
Department Public Works.

Sir,

Adverting to your letter No. 1743. dated 7th July 1858. I have the honor to acquaint you, that the Superintendent Gun Carriage Manufactory, in a Communication addressed by him to the Principal Commissary of Ordnance, requests to be informed if he may calculate upon procuring an 8 Horse Power Engine from you as one of the two Engines with which you have offered to aid him.-

2. The Principal Commissary of Ordnance informs me that there is one 8 Horse Power Engine with 1 Independent upright Saw attached in the supply of Steam Engines received by the "Malabar" for the use of the Public Works Depart.t and if you approve of the same being transferred to the Superintendent Gun Carriage Manufactory, with a 6 Horse Power Engine, the Principal Commissary of Ordnance will be instructed to hand over the Engines accordingly.-

3. If the above arrangement is carried into effect, the Department Public Works will

will then have remaining in the Arsenal.
2. Six H. P. Engines and Boilers Combined.
3. Six " " " and 3 Pairs of 8 1/2 inch bore Combined Paine and Gearing
2. Four " " " and Boilers combined.
4. The 2. Six Horse Power Engines made over to the Mint by your order, and the 2. proposed to be sent to the Gun Carriage Manufactory, added to the 7 represented in this above Statement, will make a total of 11 Engines, this number received by the Malabar.
5. An Early reply is requested.

Inspector Genl's Office
Fort St. George
14th July 1858

I have the honor to be &c &c
Sd/ G. F. Fasken Captn
For Inspector Genl of Ordnance
and Magazines.

/True Copy/
Officiating Chief Engineer

Compd. L.S.U.

Compd. L.S.U.

D

Central office P.W.D.
Fort Saint George
14th July 1858.
No. 1953
57.

The Inspector General
of Ordnance and Magazines.

Sir,

In reply to your letter No: 2871. dated 14th Instant, I have the honor to inform you that the Engines I Consented to transfer to the Gun Carriage Manufactory are two of six Horse Power.

2. Major Moultland wished to have one of 8. Horse Power and I told Major Simpson that I had no objection if one of that Class were available, but it is clear from your letter that such is not the case, and therefore I beg to be distinctly understood as assenting to the transfer of 2 six Horse Power Engines and no others.

3. Will you be so good as to furnish me with the dates of the Communications from this office under which two Engines were transferred to the Mint.

4. I also beg to be informed whether in the transfers

transfer now made the Cost of the Engines is debited to the Gun Carriage manufactory and the delivery of the same detained pending a Cash payment or transfer receipt being obtained.

(Signed) J. Rose Jun.
E. Lawford
offg: Chief Engineer

Central office P.W.
~~Fort Saint George~~
14th July 1858.

(True Copy)

offg: Chief Engineer

Compd C.S.

E

Ordnance Department

59

N° 1920

From Lieut. Col. [illegible]

The Inspector General of Ordnance
and Magazines

To [illegible]

The Chief Engineer [illegible] 18[illegible]
Department Public Works

Sir

I have the honor to acknowledge the receipt of your letter N° 1953 dated 15th July 1858, and I regret to find that the Subject referred to therein is involving further references.

2 From Major Maitland's note to Major Simpson, referred to in my letter N° 2871 of the 14th Instant. I understand that Major Maitland asked you for an 8 and 6 Horse Power Engine; and the communication he received from you on the Subject led him to conclude that the Engines asked for will be placed at his disposal.

3 The 2nd para of my letter of the 14th instant states the fact of an 8 Horse Power Engine being available in the Grand Arsenal, but beg to repeat that from the supply of Engines received by the "Malabar" there is an 8 Horse Power Engine available, and if you will be so good as to refer to my letter you will observe that your consent to the transfer of this Engine

was

was asked

4 The Superintendent Gun Carriage Manufactory states that an 8 Horse Power Engine is very much better suited to his wants and I hope that for the sake of the Public interests, you will assent to its appropriation for the Gun Carriage Manufactory, in lieu of one of the 2 — 6 Horse Power Engines already given.

5 I reference to the records of your Office or to the Silent Master, will I hope give you the information called for in the 3rd para of your letter under acknowledgement.

6 The cost of the Engines to be transferred is to be debited to the Gun Carriage Manufactory.—

I have the honor to be &c.
(Signed) G. Balfour Lieut Col.
Inspector General of Ordnance
and Magazines

Inspector Genl's Office
Fort Saint George
15th July 58

True Copy
Major
Officiating Chief Engineer

Compd P.D.

F

61

No 1690

To
The Inspector General
of Ordce and Magazines
&c &c

With reference to my letter of the 14th Inst. No 1653 I have the honor to inform you that I have reason to believe the 8 H.P. Steam Engine with vertical Saw Machine belonging to the 2 Pr has been sent by the Principal Commissary of Ordnance to the Gun Carriage Manufactory and as you are already aware that this Engine is not available for that purpose I request it may be restored to the Arsenal as soon as possible for delivery to my Charge when required.

2 If I am to find that this transfer of our Machinery contrary to my expressed intention twice officially communicated to him is the result of a private correspondence between Majors Maitland and Simpson, and that the latter Officer took on himself in a note to the former to imply that it had my sanction and your own but the inference is

No 1743
dd 17th July 58

Certainly

certainly founded on mistake. Major Maitland also appears to have misunderstood both your views and mine.—

3. But the most important point I have to notice is that while the Ordnance Officers absolutely refuse on all occasions to deliver up to this Department Machinery specially sent out for its use without a Cash payment for its value by the delay of which on the part of the local Officers I am prevented from sending this very steam saw Machine to its destination where it is urgently wanted they have the power and the will to make over our Machinery to other Departments without any such formalities.—

4 It will be for the Government to determine how far such a system is conducive to the good of the Public Service.

Central Office of Ord.
16th July 1850

I have the honor to be
Sir
Your obt Servt
(Sgd) C. Lawford
Offg Chief Engineer

(True Copy)
C Lawford
Offg Chief Engineer

Compd CDS

C

53

No 2046

To
The Inspector General
of Ord.ce and Magazines

Sir,

I have the honor to acknowledge the receipt of your letter No 2672 of 15 July 50 and request you will be good enough to forward a true Copy of the Communication from myself to Major Maitland referred to in Para 2.

2. Your letter of the 4th Instant ... states that an 8 H.P. Engine with some inde[pen]dent upright saw Machine is among those in the Arsenal belonging to this Department; but the transfer of this Engine was distinctly declined in my letter of the 6th June No 1986 and you have actually passed my Indent for it.

3. That this is the 8 H.P. Engine removed to the Gun Carriage Manufactory I can have no doubt because it was stated by Major Simpson to be the only one in the

Original

Ordenal.-

4. Referring to Para 5 of your letter I must again beg the favor of your forwarding to me Copies of the papers on which two Engines were transferred to the Mint for the only record of the transaction in this office is the letter to the Mint Master conveying the Chief Engineers Consent to the transfer

Central Office of P.W.
17th July 1850.

I have the honor to be &c
(Sgd) C. Lawford
Offg Chief Engineer

(True Copy)

Offg Chief Engineer

Central Office of Public Works
Fort Saint George 20th July 1858.

No 2108

From
The Officiating Chief Engineer

To
The Secretary to Government

Sir

In my letter No: 847 dated 10th instant I advanced to the difficulties raised by the Inspector General of Ordnance to the delivery of Machinery intended for the Department of Public Works without the payment of its value and showed the inconveniences that would arise from the system, but as I am now informed that the Board of Ordnance have given directions for the machinery to be delivered free of charge, I have the honor to request that the Government will be pleased to issue instructions to the Board of Revenue to that effect.

I have &c

Public Stores

Enclosures on other letter dated 20th July

Copy in a L to G
D/19th May 1859 No 12

Enclosure in a letter from the Officiating Chief Engineer to the Secretary to Govt dated 20th July/58 No 2108

D/16th/58

Copies of correspondence connected with the Machinery &c other DOM marked A to G

2. The accompanying copies of correspondence will however show that the Principal Commissary of Ordnance assumes the power of delivering Machinery to other Departments than the D.P.W. without any formality whatever

To Supt Gent 7 July 58
From Dº 9 do No 1743
From Dº 14 do " 2772
To Dº 14 do . 2871
From Dº 15 do . 1953
To Dº 16 do . 2920
To Dº 17 do . 1990
2046

3 That Major Simpson acted under a mistaken idea of my views in this matter I do not doubt, but I may justly complain that while I am compelled to leave Machinery in the Arsenal for want of a mere formality such as a transfer receipt of its value, that very Machinery can be sent out to the Gun Carriage Manufactory without any such formal proceeding

4 I bring forward this case, not to obtain the restoration of the 8 HP Steam

14th Inst engines

Steam Engine and Saw Machine improperly made over to the Gun Carriage Manufactory, as I conclude it will not be detained after my demand to its transfer has been clearly expressed, but to shew the urgent necessity there is for placing this Department in a condition of less dependance on one which has no object in meeting our wishes or facilitating our business.

I have the honor to be
Sir
Your most obedient Servt

Central Office of P.W.
Fort Saint George
20th July 1858.

Officiating Chief Engineer

To The Secretary to Government
D.P.W.

Ed. H. Macpherson.

A

N° 1743

71

To

The Inspector General

of Ordnance and Magazines.

Sir,

On a recent visit to the Gun Carriage Yards, Major Maitland brought to my notice, that if he were supplied with two, Six Horse Power Steam Engines and two light verandahs were constructed at Small expense, he would be enabled to bring into use a Considerable part of the new Machinery Lately received from England.

Major Maitland asked me to allow him to have two of the Steam Engines sent out for this Department either until his own more powerful Engines can be properly set up, or we could procure new Engines in stead of those supplied to him.

On Enquiry as to the States of our Stores I find that we can easily spare two

From the Officer Chief Engr
Ordy & Ext. Wks
Sydney 8th May 1857

Copy in a Letter
Dated 19th May 1857 No 71

Ordy Wks 1858 Rcd
Dy Inspr Genl Fortns Rcd
No 1044

2

From
The Officer Chief Engr
Ordnance & Ext. Wks
Sydney 8th May 1857

Dated 20th July 1858
Rcd 21st Ditto
Encloses
Copy
A Continuation of
Requisition No 1847 of 10th inst
for urgent necessity
for Machinery the Property of
Government of New Plantation
or any other Light Draught
Steam Boat Machinery
Received from England per
Ship Sophia & Augustus

From the Officer Chief Engr
Ordnance & Ext. Wks
Sydney

To
The Inspector General
of Ordnance & Magazines
Melbourne
Victoria

No 19

two Six Horse Power Engines and with your concurrence I propose to allow the Superintendent Gun Carriage Manufactory the use of them so long as may be necessary for present purposes on the Condition that with the Completion of the new buildings those Steam Engines on two of equal power shall be returned to this Department.

I have directed the Garrison Engineer to Estimate for the two verandahs for protecting the Machinery from weather, and will Communicate again with you on the subject shortly.

/signed/ E. Lawford.
Offg Chief Engineer.

Central Office
Offg Chief Engineer
Fort St George
7th July 1858.

/True Copy/
/signed/ E. Lawford
Offg Chief Engineer.

B

(No 2712) 73

To.
The Officiating Chief Engineer
D. P. Works.

Sir,

I have the honor to acknowledge the receipt of your letter No 1743. dated 7th July 1858. and to express to you my acknowledgements for your proposal to place two Six Horse Power Steam Engines at the disposal of the Superintendent Gun Carriage Manufactory, and I am quite ready to give my approval to your Suggestion to Erect two light Verandahs at the Manufactory to Cover the Machinery. With the facilities so readily offered to the Superintendent Gun Carriage Manufactory, the new Machinery will, I hope soon be brought into full operation.

2. Supplies of Steam Engines ~~must~~ will be expected from England and any deficiency in

in your Stock may Shope be easily replaced at all events. I shall at all times be glaid to endeavour to aid in replacing all Stores you may at any time Spare to the Ordnance Department from those Specially Sent for the use of the Department P. Works.

Inspector General's Office
9th July 1858

I have &c
(Signed) G. Balfour
Lt. Colonel
Insp. Genl of Ordnance
& Magazines.

True Copy.
(Signed) E. Lawford
Offg Chief Engineer

C

Ordnance Department. 75

No 2871

From
The Inspector General of Ordnance
and Magazines &c.

To
The Chief Engineer
Department P. Works.

Sir.

Adverting to your letter No 1743. dated 7th July 1858. I have the honor to acquaint you, that the Superintendent Gun Carriage Manufactory, in a Communication addressed by him to the Principal Commissary of Ordnance, requests to be informed if he may calculate upon receiving an 8 Horse Power Engine from you as one of the two Engines with which you have offered to aid him.

2. The Principal Commissary of Ordnance

nance informs me that there is one 8 Horse Power Engine with 1 Independent upright Saw Machine, in the supply of Steam Engines received by the "Malabar" for the use of the Public Works Department and if you approve of the same being transferred to the Superintendent Gun Carriage Manufactory, with a Six Horse Power Engine the Principal Commissary of Ordnance will be instructed to hand over the Engines accordingly.

3 If the above arrangement is carried into effect, the Department Public Works will then have remaining in the Arsenal.

2. Six H. P. Engines and Boilers combined.
3. Six " " " and 3 Pairs of 8½ inch bore combined Pumps & Gearing;
2. Four " " " and Boilers Combined
4. The 2. Six Horse Power Engines made over to the Mint by your order, and the 2. proposed to be sent to the Gun Carriage Manufactory, added to the 7 represented in the above Statement, will make a total of 11 Engines the number received by the Malabar.

5. An early reply is requested.

Inspector Generals Office
Fort St. George - - - 3d Sept. G. T. Taylor Capt.
14th July 1858. - - - 3 For Inspector General
of Ordnance & Magazines
[true Copy]
[signed] E. Lawford
Offg. Chief Engineer.

77

D

(No 1953.)

79

To

The Inspector General

of Ordnance and Magazines.

Sir,

In reply to your letter No. 2877. dated 14th Instant, I have the honor to inform you that the Engines I consented to transfer to the Gun Carriage Manufactory are two of Six Horse Power.

2. Major Maitland wished to have one of 8 Horse Power and I told Major Simpson that I had no objection if one of that Class were available, but it is clear from your letter that such is not the case, and therefore I beg to be distinctly understood as assenting to the transfer of 2 Six Horse Power Engines and no others.

3. Will you be so good as to furnish me with the dates of the Communications from this Office under which two Engines were trans-

transferred to the Mint.

4. I also beg to be informed whether in the transfers now made the Cost of the Engines is debited to the Gun Carriage Manufactory and the delivery of the same detained pending a Cash payment or transfer receipts being obtained.

/signed/ E. Lawford
Off.g Chief Engineer.

Central Office P.W. [illegible]
Fort St. George
11th July 1858

/signed/ E. Lawford
Off.g Chief Engineer.

L. L.

1 Enc. [illegible]

17

81

Ordnance Department,

No. 2920

From

The Inspector General of Ordnance
and Magazines

To

The Chief Engineer
Department Public Works.

Sir,

I have the honor to acknowledge the receipt of your letter No. 1963 dated 11th July 1858 and I regret to find that the subject referred to therein is involving further references.

2. I am Major Maitland's note to Major Simpson, referred to in my letter No. 2871 of the 11th Instant I understand that Major Maitland asked you for an 8 and 6 Horse Power Engines; and the communication he received from you on the subject led him to conclude that the Engines asked for will be placed at his disposal.

3. The second para of my letter of the 14th Instant states the fact of an 8 Horse Power Engine being available in the Grand Arsenal, but I beg to repeat that from the supply of Engines received by the Malabar there is an 8 Horse Power Engine available, and if you will be so good as to refer to my letter you will observe that your Consent to the transfer of this Engine was asked.

4. The Superintendent Gun Carriage Manufactory states that an 8 Horse Power Engine is very much better suited to his wants and I hope that for the sake of the Public Interests, you will assent to its appropriation for the Gun Carriage Manufactory in lieu of one of the 2 - b. Horse Power Engines already given.

5. A reference to the records of your Office or to the Asst. Master, will I hope give you the information called for in the 3d Para of your letter under acknowledgement.

6. The Cost of the Engines to be transferred is to be debited to the Gun Carriage Manufactory.

Inspector General's Office
Fort St George
15th July 1858

Sigd/ G. Balfour Lieut. Col.
Inspector General of Ordce
& Magazines.

True Copy
Signed/ E. Lawford. Major
Offg Asst to Engineer

No 1990

To
The Inspector General
of Ordnance and Magazines
Sir

With reference to my letter of the 14th Instant No 1953. I have the honor to inform you that I have reason to believe the 8 Horse Power Steam Engine with vertical Saw Machine belonging to the Department P. Works has been sent by the Principal Commissary of Ordnance to the Gun Carriage Manufactory, and as you are already aware that this Engine is not available for that purpose, I request it may be restored to the Arsenal as soon as possible for delivery to my Charge when required.

2. It seems that this transfer of saw machinery Contrary to my express Stipulation as twice officially Communicated to you is the result of a private Correspondence between Major Maitland and Simpson, and that the latter

Offg

No 1713
Dated 17th July 58

Officer took on himself in a note to the former to imply that it had my sanction and your own but the inference is certainly founded on a mistake. Major Maitland also appears to have misunderstood both your views and mine.

3. But the most important point I have to notice is that while the Ordnance officers is absolutely refuse in all occasions to deliver up to this Department, Machinery specially sent out for its use without a Cash payment of its value by the delay of which on the part of the local Officers I am prevented from sending this very Steam Saw Machine to its destination where it is urgently wanted they have the power and the will to make over our Machinery to other Departments without any such formalities.

4 It will be for the Government to determine how far such a System is conducive to the good of the Public Service.

Central Office
16th July 1858

Signed C. Lawford
Offg Chief Engineer

True Copy
Signed C. Lawford
Offg Chief Engineer

No 2046.

To,
The Inspector General
of Ordnance and Magazines

Sir,

I have the honor to acknowledge the receipt of your letter No 2920, dated 15th July 1858, and request you will be good enough to forward true Copy of the Communication from myself to Major Maitland referred to in Para 2.

2. Your letter of the 14th Instant states that an 8 Horse Power Engine with one independant upright Saw Machine is among those in the Arsenal belonging to this Department, but the transfer of this Engine was distinctly declined in my letter of the 4th June No 986 and you have actually passed my Indent for it.

3. That this is the 8 Horse Power Engine removed to the Gun Carriage Manufactory I can have no doubt because it was stated by Major Simpson to be the only one in the Arsenal.

Referring

1.

Referring to Para 5 of your letter. I must again beg the favor of your forwarding to me Copies of the papers on which these Engineers were transferred to the Mint for the only record of the transaction in this office is the letter to the Mint Master Conveying the Chief Engineer's Consent to the transfer.

dated 26th July 1788 No 7688.

Central Office
of P.W.D.
17th July 1888

Sig'd J. E. Lawford
Offg Chief Engineer

True Copy
Sig'd J. E. Lawford
Offg Chief Engineer

To
L. Sanitts

No 2108.

89

From

The Officiating Chief Engineer.

To

The Secretary to Government P.W. Dept.

Sir.

Public Stores

In my letter No 1847 dated 10th instant I adverted to the difficulties raised by the Inspector General of Ordnance to the delivery of Machinery intended for the Department of P.W. without a pre-payment of its value and showed the inconvenience that sometimes arises from the System. but I was not then aware that the Ordnance Department is exempt from similar Obstruction to the receipt of its Supplies.

Enclosure and Copies of letters marked A. to G.

2. The accompanying Copies of Correspondence will however show that the Principal Commissary of Ordnance assumes the power of delivering Machinery to other Departments than the D. P. W. without any formality whatever.

To Inspr Genl 7 July 58. No 1743.
From do 9 July. No 2712.
From do 14 do " 2871.
To do 14 do " 1963.
From do 15 do " 2920.
To do 16 do 1990.
To do 17 do 2046.

Enclosure in a letter from the Officiating Chief Engineer to the Secretary to Government P.W. Dept. dated 16th Sept 58.

Copies of Correspondence connected with the Machinery ordered by the P.W. Dept.

3. Brat. Major Simpson acted under a mistaken idea of my views in this matter I do not doubt, but I may justly Complain that while I am compelled to leave Machinery in the Arsenal for want of a mere formality such as a transfer receipt of its value, that very Machinery. Can be sent out to the Gun Carriage Manufactory without any such formal proceeding.

4. I bring forward this case not to obtain the restoration of the 8 Horse Power Steam Engine and Saw Machine improperly made over to the Gun Carriage Manufactory, as I conclude it will not be detained after my dissent to its transfer has been so clearly expressed, but to shew the urgent necessity there is for placing this Department in a Condition of less dependance on one which has no object in meeting our wishes or facilitating our business.

Central Office of W.D.
Fort St George
20th July 1858

Lieut Col Lawford R.A.
Officiating
Chief Engineer

2nd
Lennard Smith

Central Office of Public Works.
Fort Saint George 23rd July 1858.

93

No 2205

From
The Officiating Chief Engineer

To
The Secretary to Government P.W.

Sir

I have addressed Government in my letter No 2108. dated 20 instant, on the subject of a Steam Engine & P. Power transferred to the Gun Carriage Manufactory, the order of Government Marginally quoted has been brought to my notice from which I regret to find that I acted without any authority in consenting to transfer 2 H.P. Engines, and I can only plead in excuse my absence from Madras at the date of the order, & my desire to

dated Sept 21/57
No 145

1475 Chief Engineer

Public Works Department
Central Office
Fort St George

The Officiating Chief Engineer
Fort St George

No 2108 — 20th July 1858

Contingent Rs 2105.

In continuation of
Letter No 1852 of 19th inst.
I beg to submit the accompaniment
Estimate for Rs 2105 for
Contingencies of Steam Engine &
Machinery, Gun Carriage Manufactory
Fort St George.

Estimate for Rs 2105 Rupees

to contribute to the convinience of the Ordnance Department while I felt that the Engines in creation would be better cared for if in actual use than they now are.

2. Put the 8 H.P. Engine which the Principal Commissary of Ordnance transferred to the Gun Carriage Manufactory had been already underrated for, and sanctioned by Government for the Coimbatore district, and I knew that I could not make it over to another Department, a fact of which the Inspector General of Ordnance and Magazines ought I conceive to have been well aware. dated 28th June/58 No 1217

I have the honor to be
Sir
Your most obedient Servant
Fort St George
23rd July/1858

Lacon Ford
Officiating Chief Engineer

Fort St George,
the 28th July 1858.

No III

Sir,

Major General Colonel Commandant &c &c &c
Clothing & Military Store Department

Madras

Major General
Officiating Chief Engr &c &c &c
Fort St George

Sir,

I am directed to forward herewith for your information and guidance, a copy of a letter from the Board of Admiralty to the Secretary to Government, dated 26th May last, intimating that the Lords Commissioners of the Admiralty have directed that the Clothing and Accoutrements for the Madras Sappers and Miners, when sent to Madras, may be forwarded in the Government Ships, and not in Merchant Vessels.

2. The Admiralty have also directed that the Clothing and Accoutrements for the Madras Sappers and Miners, when sent to Madras, may be forwarded in the Government Ships, and not in Merchant Vessels.

I have the honor to be Sir
Your most obedient Servant
Secretary to Government
Officiating Chief Engr

Copy to D.G.

P. Works — 1858 Sept. 22
Dy. to Com. W. Engr
No 1633.

Leasing in a L to C
dy 19th May 1859 No 12.

From
The Offg Chief Engr
To
The Secretary to Government
Public Works Deptt

Dated 23d July 1858
Rect 24th July 1858

No 2205.

Expressing regret with reference to Ex. Mins: Cons: dated 21st January 1857 No 145 that he has acted without any authority in consenting to lend 2 6 H.P. Engines and pleading in excuse his absence from Madras at the date of the order and the desire to contribute to the convenience of the Ordnance Department.

No 20.

C to C No 1537 - 4th August 1858.

Central Office of P.W.
Fort Saint George.
31st July 1858. 99

No. 2401.

From
The Officiating Chief Engineer
To.
The Secretary to Government
D. P. W.

Public.

Sir,

In continuation of my letter No. 2108 dated 20th July 1858, and with reference to Extract Minutes of Consultation No. 192 dated 18th March 1858, I have the honor to submit copy of a letter from the Acting Mint Master No. 111 dated 28th July 1858 stating that the Steam Engines issued to him have not yet been paid for, and thus another instance is afforded of the facilities enjoyed by other Departments of obtaining Machinery from the Arsenal while our urgent demands are left unfulfilled the Jackatalla works being now actually delayed for want of Saw machinery an indent for which was passed by Government on the 28th June 1858, but which

X Enclosure
1 copy of letter No. 111
dated 28th July 1858.

Ex. Min of Cons.
No. 1517

I

Enclo: in a letter from the Officiating Chief Engineer

To
The Secretary to Govt.
Orders.
No. 1944/558
Dated 31st July 1858
Received

No 2401

Copy of a letter from the Acting Mint Master stating that the Steam Engines are received without payment. No receipt of their value received as yet.

I cannot obtain from the Arsenal owing to the District Engineer's neglect to send a transfer receipt.

2 I offer these observations in the hope that the Government will see fit to place the Dept. P.W. on the same footing as other Departments in regard to the facility of obtaining machinery.

I have the honor to be
Sir
Your most Obedient Servant

Central office of PW
Fort St. George
24th July 1858

Lamford Major
Officiating Chief Engineer

Compd. P.W.

Public Works Office

No.

Sir/Madam, I am directed by the Commissioners of Works to transmit herewith a Report from the Surveyor of Dockyards, dated 28th May 1858 (No. 132) on the subject of Engines for Pumping Water from the Foundations of the Graving Docks at Chatham, Sheerness and Portsmouth, and to request that you will lay the same before the Lords Commissioners of the Admiralty.

I am, Sir, Your obedient Servant

To the Secretary to the Admiralty

&c. &c. &c.

Recorded Aug. 2

Enclo 1. No 2407

Pub. 1858 Department

Dy. to Com. Whitbread

No. 1714

From

The Secretary to the Admiralty

To

The Secretary to the Board of Works

&c. &c. &c.

Dated 31 July 1858

Received 2 Aug.

Encls 1. No 2407

Pub. 1858 4 August 1858.

Forwarding) Letter from the Cy Mints Master and pointing out the instances & facilities enjoyed by other Depts of obtaining machinery from the Arsenal while the urgent demands of this Dept are left unfulfilled & requesting the same may be placed on the same footing

Croisy in a Let to Co dy 19th May 1859 No. 12.

No. 21.

as other Departments in regard to the facility of obtaining Machinery

to the existing practice.

The Government have as far back as 1852 endeavoured to make arrangements for a Depôt for Surveying and Engineering Instruments by means of a Committee, but for four years they came to no conclusion and in 1856 the matter was transferred to the Chief Engineer who was also unable to form any definite plan. Subsequently with reference to the letter from the Secretary to the Govt of India dated 28th Jan/58 No 451 the Chief Engineer was called upon to submit a plan for the general reception and storing of Instruments, such as appears to obtain in Bengal but in his letter of 29th May he declared his inability to do so without more knowledge of the Bengal plan.

The Government have in their letter to Major

Ex: Minss of Cons: 8th July Dft 4
11th April 1852 No 957.

Ex: Minss Cons: 6th March 56 No 3142

Ex: Minss Cons: 8th July Dept 15th February 58

Strachey 22nd June 1858, decided to have full information as to the Bengal practice, but it is evident that at present there is no proper Depôt or Establishment with the Chief Engineer and the Government must therefore confirm their previous order of 20th May 1858.

105

The term existing practice in the 2nd para order of the 20th May refers to the practice at the Arsenal, and not to that of Chief Engineer's Office.

The subject of reform of instruments cannot at present be discussed. Only so late as 8th May 1858 the Chief Engineer reported to Government that he was unable to arrange a plan.

The Government must also be understood that they fully recognise the principle that Instruments such as those used in the Department of Public

Works

Works should be under the entire charge and responsibility of the Department and also ~~that as proposed by~~ Major Lawford ~~proposes in his Memo dated~~ by their Boards ~~regarding~~ are considered ~~to be sanctioned~~ such ~~that should be~~ adopted. But the proposed arrangements for the reception and storing are made after the manner practiced in Bengal, the Instruments must be returned to the custody of the Inspector General of Ordnance as heretofore directed.

by the Govt.

P. W. D

No. 1537 107

Extract from the Minutes of Consultation
Under date the 4th of August 1858.
Read the following Papers.

From the Chief Engineers. (Here enter 28th May 1858-No. 632)

From the officer in charge of Central office of P.W. (Here enter 25th June — — 1421)

From the ~~Offg.~~ Chief Engineers. (Here enter 10th July — — 1847)

From ~~—~~ Do. ~~—~~ Do. (Here enter 20th — — — 2108)

From ~~—~~ Do. ~~—~~ Do. (Here enter 23d — — — 2205)

From ~~—~~ Do. ~~—~~ Do. (Here enter 31st — — — 2401)

Ditto. The Communications recorded above ~~being~~ represent the inconveniences to which the department of Public Works will be subjected by

by the order of the 20th May 1858 making the Arsenal the depository for the scientific instruments appertaining to that department, and the Inspector General of Ordnance and Magazines the Controller of their receipt and issue. They also refer to the delay and difficulties arising from the Rule which requires Cash payment before delivery. To the Colonel Faber and Major Lonsford urge strong objections to the proposed system, and the latter officer doubts whether it is one calculated to promote either efficiency or economy.

2 Irrespective of the inconveniences pointed out, it is stated that the Public

Public Works Stores already encumber the Arsenal, that the want of space in it in consequence, is felt as a great evil by the Ordnance Officers; and that valuable Steam Engines and Machinery are exposed to injury from the want of proper cover to protect them. Major Lonsford in view, however, his own explanation for the custody and care of the Stores of the Public Works Department, as well as for their proper and economical repairs, especially of Scientific instruments, the means for which are ~~wanted here~~ said to be wanting in the Ordnance department, and states that there is sufficient storage room for such instruments in the Central Office. He therefore solicits

solicits that the orders of the 20th May 1858 may be held in abeyance, and that the receipt and supply "of drawing Materials instruments and apparatus "belonging to the Department "Public Works" "be left" on "the hitherto Customary "footing".

3 The Government will not now enter upon a discussion of the various points mooted in the above letter, but as it appears from para 9 of Major Lawford's letter (of the 25th June) that "for "the Storage of instruments "there is sufficient room in "the Central Office, which "will be greatly enlarged, "by the anticipated removal "of the Survey School; the Government will accede to

now under charge of the Chief Engineer

to the officiating Chief Engr's wishes and permit the orders of the 20th May, so far as it affects Scientific instruments of the Depart. of Public Works, to remain in abeyance and allow as regards instruments matters to continue on their former footing, pending receipt of information as to the practice which may eventually be established in Bengal for this branch of the department. Under date the 22d June last, the Supreme Government were addressed for information "as to the "means at the disposal of "the Chief Engineer in that "Presidency for receiving, "storing, Keeping in order & "issuing Machinery Stores "and Scientific instruments "sent

lent out for the use of
"the Public Works Department".
The reply to this reference,
just received, intimates
that the subject has been
ordered to be referred for
consideration and report
to a Committee of Officers,
as the practice obtaining
in that Presidency had
not been "found altogether
satisfactory". The Govern=
=ment of India however
promise to communicate
in due course the result
of the Committee's investi=
=gation, when the subject
will again be considered.
4th As regards Scienti=
=fic instruments already
received and lodged in
the Arsenal the Government
will not authorize any
pending the receipt of the report from the Bengal Com=
alteration of these orders. They
-mittee

from Govt of India 16th Feb 1858
No 3305.

will

be 113
will contain under the
charge of the ordnance
department, and with the obtain=
=ed by indent according
to the established Custom.
5 The deviation from
the regular mode of
proceeding exhibited in
Major Lawford's letter of
the 20th July relative to the
Steam Engine obtained
by the Superintendent of
the Gun Carriage Manufac=
=factory from the Principal
Commissary of Ordnance
will be brought to the
notice of the Inspector
General of Ordnance and
magazines. The eight
horse power Engine
will of course be returned,
if not already done, and
the two Six horse power
Engines

ting inex referred to in
Major Lowford's letter
of the 23d. July will be
procured in the autho=
=rized Manner -

Copy

To Copies to the Offg Chief Engr.
Copy -

4 — Supdg. Genl. of O. & Magazines
with Major Gs letter
20. July Rec'd 1808 -

Copy in a. L to C
8/19th May 1859 No 12.

Public Works Dept
D.O. to Govt. 10th Augt.

No. 1537.

Submit Plans & Estimate
Dept. 2nd August 58.

From the Inspector Genl of Ordnance &
Magazines 9th July 58 & 1786 Encls.
24

No 16 No 22

Under the circumstances represented
I think that the order of the 20th May regarding
the Custody and issue of the Scientific instru-
ments of the P.W. Department should be
observed and that matters as regards these
instruments henceforward be continued on
the former footing, providing the receipt of
information as to the practice which may
be eventually be established in Bengal
for this branch of the Department.